



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80A BYPASS RATIO: 5.0
 UNIQUE ID NUMBER: 1GE010 PRESSURE RATIO (π_{00}): 29.0
 COMBUSTOR:
 ENGINE TYPE: TF RATED THRUST (F_{00}) (kN): 208.8

REGULATORY DATA

| CHARACTERISTIC VALUE: | HC | CO | NO _x | SMOKE NUMBER |
|--|------|------|-----------------|--------------|
| D _p /F ₀₀ (g/kN) or SN | 12.1 | 43.6 | 61.6 | 15.6 |
| AS % OF ORIGINAL LIMIT | 61.7 | 36.9 | 62.9 | 80.6 |
| AS % OF CAEP/2 LIMIT (NO _x) | | | 78.6 | |
| AS % OF CAEP/4 LIMIT (NO _x) | | | 94.2 | |
| AS % OF CAEP/6 LIMIT (NO _x) | | | 107.0 | |
| AS % OF CAEP/8 LIMIT (NO _x) | | | 126.5 | |

DATA STATUS

x PRE-REGULATION
 - CERTIFICATION
 x REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

| MODE | POWER SETTING (%F ₀₀) | TIME (minutes) | FUEL FLOW (kg/s) | EMISSIONS INDICES (g/kg) | | | SMOKE NUMBER |
|--|-----------------------------------|----------------|------------------|--------------------------|---------|-----------------|--------------|
| | | | | HC | CO | NO _x | |
| TAKE-OFF | 100 | 0.7 | 2.145 | 0.29 | 1.00 | 29.80 | 12.0 |
| CLIMB OUT | 85 | 2.2 | 1.795 | 0.29 | 1.10 | 25.60 | 10.0 |
| APPROACH | 30 | 4.0 | 0.615 | 0.47 | 3.10 | 10.30 | 2.0 |
| IDLE | 7 | 26.0 | 0.150 | 6.29 | 28.20 | 3.40 | 2.0 |
| LTO TOTAL FUEL (kg) or EMISSIONS (g) | | | 709 | 1636 | 7407 | 11066 | - |
| NUMBER OF ENGINES | | | | 1 | 1 | 1 | 1 |
| NUMBER OF TESTS | | | | 3 | 3 | 3 | 1 |
| AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX) | | | | 7.8 | 35.5 | 53.1 | 12.0 |
| SIGMA (D _p /F ₀₀ in g/kN, or SN) | | | | 1.0 | 0.4 | 3.0 | |
| RANGE (D _p /F ₀₀ in g/kN, or SN) | | | | 7.17-8.93 | 35-35.9 | 49.6-55.4 | |

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

| | |
|----------------------|-----------|
| BAROMETER (kPa) | 99.1-99.8 |
| TEMPERATURE (K) | 275-277 |
| ABS HUMIDITY (kg/kg) | 0.002 |

FUEL

| | |
|----------|-------|
| SPEC | Jet A |
| H/C | 1.93 |
| AROM (%) | 17.1 |

MANUFACTURER: General Electric Company
 TEST ORGANIZATION: Production Engine Test
 TEST LOCATION: Production Test Cells M35
 TEST DATES: 11/11/1983-12/11/1983

REMARKS

1. Ref GE Report no R83AEB635.
2. Engine S/N 580214.
3. Smoke from Engine S/N 580005, report R81AEG513.
4. With approval of US FAA, idle power data were only acquired at the engine design setting of 3.69%.

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)